

Serial No. **10/029,150**

Docket No. **K-0383**

Amendment dated December 7, 2005

Reply to Office Action of September 7, 2005

REMARKS

Initially, in the Office Action dated September 7, 2005, the Examiner has rejected claims 1, 2, 7 and 8 (sic) under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,266,701 (Sridhar et al). Further, claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Sridhar et al. and further in view of U.S. Patent No. 6,839,732 (Vincent et al.). Claims 12 and 13 (sic) have been rejected under 35 U.S.C. §103(a) as being unpatentable over Sridhar et al. and further in view of Internet Protocol Specification (IPS).

By the present response, Applicant has canceled claims 5 and 14 without disclaimer. Further, Applicant has amended claims 1, 7 and 15 to further clarify the invention. Claims 1-4, 6-13, and 15-18 remain pending in the present application.

Entry of the amended claims is proper under 37 C.F.R. §1.116 since the amendments: (1) place the application in condition for allowance (for the reasons discussed herein); (2) do not raise any new issues requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution without incorporating additional subject matter); (3) satisfy a requirement of form asserted in the previous Office Action; and/or (4) place the application in better form for appeal (if necessary). Entry is thus requested.

35 U.S.C. §102 REJECTIONS

Claims 1, 2, 7, and 8 (and apparently claims 3, 4 and 9-11 also) have been rejected under 35 U.S.C. §102(e) as being anticipated by Sridhar et al (hereinafter “Sridhar”). Applicant respectfully traverses these rejections.

Sridhar discloses a communication system for improving communication of a data network between an application and remote systems where each of the remote systems is configured to communicate using at least one of multiple transport layer communication protocols. The communication system accepts a request from the application to communicate with one of the remote systems, selects a transport layer communication protocols for communicating with the requested remote system, and communicates using the selected transport protocol with the requested system. In addition, the system may select one of multiple network layer communication protocols to communicate with the requested remote system.

Regarding claims 1 and 7, Applicant submits that Sridhar does not disclose nor suggest limitations and a combination of each of these claims of, *inter alia*, receiving a message transmission request at a router from a connectionless-orientated user, the request including a stream-based message and a destination address of the stream-based message; or determining by the router, whether any one of currently existing sockets, whose file descriptors are stored in a socket management database at the router, is connected to the destination address; or sending a connection request to a connection manager at the router to be connected to a TCP

(transmission control protocol) layer to provide a connection-orientated service to the connectionless-orientated user, if it is determined in the step (b) that none of said existing sockets are connected to the destination address; or an interprocessor communication apparatus that includes a socket management database, a message-transmitting mobile module, and a connection manager.

The Examiner asserts that Sridhar discloses receiving a message transmission request from a connectionless-orientated user, the request including a message and a destination address of the message at column 19, lines 14-17. However, this is not receiving a message transmission request from a connectionless-orientated user, the request including a stream based message and a destination address of the message, as recited in the claims of the present application. These portions of Sridhar merely disclose that if the request from the proxy application 613 is to connect a TCP socket to a remote computer, the redirector 914 first looks up the TCP socket handle and socket association table 915. These portions of Sridhar relate to activities entirely inside of a gateway computer 612 where a redirector contained in communication modules of the gateway computer receives a request from a proxy application also contained in the gateway computer. In contrast, the limitations in the claims of the present application relate to receiving a request at a router from a connectionless-oriented (i.e., mobile) user.

The Examiner further asserts that Sridhar discloses determining whether any one of currently existing sockets, whose file descriptors are stored in a socket management database, is

connected to the destination address, at column 19, lines 20-22. However, these portions of Sridhar merely disclose that if the TCP socket handle is not listed in the socket association table, the redirector looks up the host address in the table. This is not determining whether any one of currently existing sockets is connected to the destination address, as recited in the claims of the present application. These portions of Sridhar merely relate to whether a single TCP socket in the request is listed in the socket association table. In contrast, the claims of the present application relate to determining whether any one of currently existing sockets is connected to the destination address.

Moreover, the Examiner asserts that Sridhar discloses sending a connection request to a connection manager to be connected to a TCP layer to provide a connection-orientated service to the connectionless-orientated user, at column 19, lines 36-56. However, these portions of Sridhar merely disclose that if the connect request is to an HTTP server, a request to create a socket is passed to the HTTP engine that then obtains an XTP socket handle from the XTP module and returns the socket handle to the redirector, and that if the addressed host is not any HTTP server, the redirector request the HTTP module to create a XTP socket and the TCP socket handle and the new XTP socket handle are recorded in the socket association table. This is not sending a connection request to a connection manager at a router to be connected to a TCP layer to provide a connection-orientated (e.g., wired) service to the connectionless-orientated (e.g., wireless) user, if it is determined that none of the existing sockets are connected

to the destination address, as recited in the claims of the present application. The HTTP engine in Sridhar is not a router as recited in the claims of the present application. Further, these portions of Sridhar do not disclose or suggest sending a request to provide a connection-orientated service to a connectionless-oriented user, as recited in the claims of the present application. In addition, according to the limitations and the claims of the present application, the request is sent if it is determined that none of the existing sockets are connected to the destination address. In contrast, the activities in Sridhar relate to whether or not the addressed host is an HTTP server.

Moreover, Sridhar does not disclose or suggest an interprocessor communication apparatus that includes a socket management database, a message-transmitting module, and a connection manager, as recited in the claims of the present application. The Examiner asserts only that Sridhar discloses a connection manager creating a new socket connected to the destination address, at column 19, lines 47-56. However, as noted previously, these portions of Sridhar merely disclose that if the addressed host is not an HTTP server, the redirector request the XTP module to create a XTP socket and the TCP socket handle and the new XTP socket handle are recorded in the socket association table. This is not a connection manager as recited in the claims of the present application that creates a new socket connected to a destination address and attempts to connect the module with the TCP layer after receiving the connection request from the module. As noted previously, the redirector in Sridhar is part of the

communication modules that are part of the gateway computer. Sridhar does not disclose or suggest an interprocessor communication apparatus including a socket management database, a message transmitting module and a connection manager, as recited in the claims of the present application.

Regarding claims 2-4 and 8-11, Applicant submits that these claims are dependent on one of independent claims 1 and 7 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims. For example, Applicant submits that Sridhar et al. does not disclose or suggest sending the message to the TCP layer if it is determined that any one of the existing sockets is connected to the destination address.

Accordingly, Applicant submits that Sridhar does not disclose or suggest the limitations in the combination of each of claims 1, 2-4 and 7-11 of the present application. Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

35 U.S.C. §103 REJECTIONS

Claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Sridhar in view of Vincent et al. (hereinafter "Vincent"). Applicant respectfully traverses this rejection.

Vincent discloses a gateway that provides communication of tightly coupled XA transactions to a server hosting a DBMS and makes efficient use of domain socket pairs to implement demultiplexing in the gateway. The gateway includes a TCP/IP listener process which accepts connection requests from a transaction manager. Logical agents represent the

application connection and are managed by a logical agent scheduler and are passed within the gateway using domain socket pairs. Gateway agents are dedicated to identified tightly coupled XA transactions to provide tightly coupled XA transaction support for DBMS systems which do not provide such support directly. The domain socket pairs and the gateway are assigned to logical agents schedulers and are available in a domain socket pool. A wait queue is provided to buffer logical agents when connection to the server is not available or where there are no domain socket pairs available in the domain socket pool. The wait queue is itself implemented as a domain socket pair.

Regarding claim 6, Applicant submits that claim 6 is dependent on independent claim 1 and, therefore, is patentable at least for the same reasons noted previously regarding this independent claim. Applicant submits that Vincent does not overcome the substantial defects noted previously regarding Sridhar. For example, Applicant submits that none of the cited references disclose or suggest informing the user of an incomplete message transmission, if not connected to the TCP layer for a given period of time.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in the combination of claim 6 of the present application. Applicant respectfully request that this rejection be withdrawn and this claim be allowed.

Claims 12 and 13 (and apparently claims 15-18 also) have been rejected under 35 U.S.C. §103(a) as being unpatentable over Sridhar and further in view of Internet Protocol Specification. Applicant respectfully traverses these rejections.

The Internet Protocol Specification discloses specifications for the DOD standard Internet Protocol. This document discloses information related to motivation, scope, interfaces, operation, relation to other protocols, model of operation, function description, gateways, Internet header format, discussion, and interfaces.

Regarding claim 15, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of this claim of, *inter alia*, a communication method for a mobile communication system that includes receiving a message transmission request containing a stream-based message from a connectionless oriented user at a connection orientated router, or formatting the stream-based message into a connection-oriented protocol data unit (PDU) including a source address of the connectionless-oriented user and a destination address, or transmitting the stream-based message through an existing connection-oriented socket connected to the destination address if the socket exists. The Examiner asserts that Sridhar in view of Internet Protocol Specification, discloses these limitations in column 19, lines 14-16, 17-20, and 47-56. However, as discussed previously, these portions of Sridhar do not disclose or suggest the limitations in the claims of the present application. For example, as noted previously, Sridhar does not disclose or suggest a

connectionless-orientated user or this user sending a message to a connection-orientated router.

Further, Sridhar does not disclose or suggest a message transmission request containing a stream-base message, as recited in the claims of the present application. Further, none of the cited portions of Sridhar or the Internet Protocol Specification disclose or suggest formatting the stream-based message into a connection-orientated PDU including a source address of the connectionless-oriented user and a destination address. Sridhar does not disclose or suggest anything related to formatting a message from a connectionless-oriented user into a connection-orientated protocol data unit, as recited in the claims of the present application.

Regarding claims 12, 13, and 16-18, Applicant submits that these claims are dependent on one of independent claims 7 and 15 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims. For example, Applicant submits that none of the cited references disclose or suggest where the module adds a message header to the message, the header including a message header indicator, a message length, a source address, the destination address, and a message identifier, or creating a new connection-orientated socket to the destination address if the existing connection-orientated socket does not exists, and transmitting the message to the destination address using the new connection-orientated socket.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious, the limitations in the combination of

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each of claims 12, 13, and 15-18 of the present application. Applicant respectfully request that these rejections be withdrawn and that these claims be allowed.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that claims 1-4, 6-13, and 15-18 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned, Frederick D. Bailey, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this,

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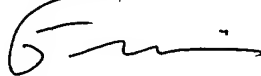
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concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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